



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 3

Complete if Known

Application Number	10/585,582
Filing Date	July 10, 2006
First Named Inventor	Alexander FINKELSTEIN
Group Art Unit	2891 Confirmation No. 6641
Examiner Name	Matthew L. REAMES
Attorney Docket Number	FINKELSTEIN=1

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	US- 6,355,953 B1	03-12-2002	George KIRCZENOW	
	AB	US-2003/0075772 A1	04-24-2003	Alexander EFROS et al.	
		US-			
		US-			
		US-			

NON PATENT LITERATURE DOCUMENTS /OTHER INFORMATION

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AC	S. A. WOLF et al., "Spintronics: A Spin-Based Electronics Vision for the Future", <u>SCIENCE</u> , Vol. 294, pp. 1488 - 1495, November 16, 2001	
	AD	H. OHNO et al., "Semiconductor Spin Electronics", <u>JSAP International</u> , Mo. 5, pp. 4-13, January 2002.	
	AE	Gary PRINZ, "Magnetoelectronics", <u>SCIENCE</u> , Vol. 282, pp. 1660-1663, November 27, 1998.	
	AF	Mark JOHNSON et al., "Interfacial Charge-Spin Coupling: Injection and Detection of Spin Magnetization in Metals", Vol. 55, No. 17, pp. 1790-1793, October 21, 1985.	
	AG	R. FIEDERLING et al., "Injection and Detection of a spin-polarized current in a light-emitting diode", <u>NATURE</u> , Vol. 402, pp. 787-789, December 16, 1999.	
	AH	Y. OHNO et al., "Electrical spin injection in a ferromagnetic semiconductor heterostructure", <u>NATURE</u> , Vol. 402, pp. 790-792, December 16, 1999.	
	AI	Vladimir Ya. KRAVCHENO et al., "Spin injection into a ballistic semiconductor microstructure", <u>Physical Review B</u> , Vol. 67, pp. 121310-1 - 121310-4, 2003.	
	AJ	G. F. DRESSELHAUS, "Spin-Orbit Coupling Effects in Zinc Blende Structures", <u>Physical Review</u> , Vol. 100, No. 2, pp. 580-586, October 15, 1955.	
	AK	E. I. RASHBA, "Properties of Semiconductors with an Extremum Loop I. Cyclotron and Combinatorial Resonance in a Magnetic Field Perpendicular to the Plane of the Loop", Soviet Physics - Solid State, Vol. 2, pp. 1109-1122, June 1960.	
Examiner Signature	/Matthew Reames/		Date Considered 09/28/2009

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Sheet 2 of 3

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Examiner Name	Matthew L. REAMES
Attorney Docket Number	FINKELSTEIN=1

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	AL	Yu A. BYCHKOV et al., "Oscillatory effects and the magnetic susceptibility of carriers in inversion layers", <u>J. Phys. C. Solid State Phys.</u> , Vol. 17, pp. 6039-6045, 1984.	
	AM	J. LUO et al., "Effects of inversion asymmetry on electron energy band structures in GaSb/InAs/GaSb quantum wells", <u>Phys. Review B</u> , Vol. 41, No. 11, pp. 7685-7693, April 15, 1990.	
	AN	Simon M. SZE, "Semiconductor Devices: Physics and Technology", <u>Wiley Text Books</u> , 2 nd Edition, pp. 246-253 and 332-368, September 2001.	
	AO	Y. SATO et al., "Large spontaneous spin splitting in gate-controlled two-dimensional electron gases at normal In _{0.75} Ga _{0.25} As/In _{0.75} Al _{0.25} As heterojunctions", <u>Journal of Applied Physics</u> , Vol 89, No. 12 pp. 8017-8021, June 15, 2001.	
	AP	P. M. MORSE et al., "Methods of Theoretical Physics I", Chapter 12.2 Distribution Functions for Diffusion Problems, pp. 1606-1638, June 1953.	
	AQ	Igor ZUTIC et al., "Spintronics: Fundamentals and applications", <u>Review of Modern Physics</u> , Vol. 76, pp. 323-410, April 2004.	
	AR	A. A. KISELEV et al., "T-shaped spin filter with a ring resonator", <u>Journal of Applied Physics</u> , Vol. 94, No. 6, pp. 4001-4005, September 15, 2003.	
	AS	A. A. KISELEV et al., "T-shaped ballistic spin filter", <u>Applied Physics Letters</u> , Vol. 78, No. 6, pp. 775-777, February 5, 2001.	
	AT	Sanker Das. SARMA, "Spintronics", <u>American Scientist</u> , Vol. 89, pp. 516, November 2001.	
	AU	I. I. RABI, "Space Quantization in a Gyating Magnetic Field", <u>Physical Review</u> , Vol. 51, pp. 652-654, April 15, 1937.	
	AV	J. SPECTOR et al., "Control of ballistic electrons in macroscopic two-dimensional electron systems", <u>Appl. Phys. Letters</u> , Vol. 56, No. 10, pp. 967-969, March 5, 1990.	

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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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	AW	L. W. MOLENKAMP et al., "Electron-beam collimation with a quantum point contact", <u>Physical Review B</u> , Vol. 41, No. 2, pp. 1274-1277, January 15, 1990.	
	AX	Yu A. BYCHKOV et al., "Properties of a 2D electron gas with lifted spectral degeneracy", <u>JETP Letters</u> , Vol. 39, No. 2, pp. 78-81, January 25, 1984.	
	AY	S. DATTA et al., "Electronic analog of the electro-optic modulator", <u>Applied Physics Letters</u> , Vol. 56, No. 7, pp. 665-667, February 12, 1990.	
	AZ	J. LUO et al., "Observation of the zero-field spin splitting of the ground electron subband in GaSb-In-As-GaSb quantum wells", <u>Physical Review B</u> , Vol. 38, No. 14, pp. 10142-10145, November 15, 1988.	
	BA	B. DAS et al., "Evidence for spin-splitting in $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{In}_{0.52}\text{Al}_{0.48}\text{As}$ heterostructures as $B \rightarrow 0$ ", <u>Physical Review B</u> , Vol. 39, No. 2, pp. 1411-1414, January 15, 1989.	
	BB	J. NITTA et al., "Gate Control of Spin-Orbit Interaction in an Inverted $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{In}_{0.52}\text{Al}_{0.48}\text{As}$ Heterostructure", <u>Physical Review Letters</u> , Vol. 78, No. 7, pp. 1335-1338, February 17, 1997.	
	BC	G. ENGELS et al., "Experimental and theoretical approach to spin splitting in modulation-doped $\text{In}_x\text{Ga}_{1-x}\text{As}/\text{InP}$ quantum wells for $B \rightarrow 0$ ", <u>Physical Review B</u> , Vol. 55, No. 4, pp. R1958-R1961, January 15, 1997.	
	BD	S. J. PAPADAKIS et al., "Spin-splitting in GaAs two-dimensional holes", <u>Physica E</u> , Vol. 9, pp. 31-39, 2001.	
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